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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,683	09/18/2003	Hiroaki Tanizaki	09792909-5673	4074
26263	7590	06/08/2006	EXAMINER	
SONNENSCHEIN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080				WEINER, LAURA S
ART UNIT		PAPER NUMBER		
		1745		

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/664,683	TANIZAKI ET AL.	
Examiner	<b>Art Unit</b>		
Laura S. Weiner	1745		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 27 February 2006 and 03 May 2006.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 10-18 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. \_\_\_\_ .  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election of Group III, newly added claims 10-18 in the reply filed on 5-3-06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 5-3-06.

***Claim Rejections - 35 USC § 102***

3. Claims 10, 12-14, 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kajiura et al. (JP 2001143701, translation and abstracts).

Kajiura et al. teaches in the abstract of page 13 and page 2 of translation, a battery comprising an anode containing a Li alloying alloy phase and a Li non-alloying phases. The alloying phase is preferably CoSn, CoSn<sub>2</sub>, Co<sub>3</sub>Sn<sub>2</sub>, Ni<sub>3</sub>Sn<sub>4</sub>, Ni<sub>3</sub>Sn<sub>2</sub> and/or Ni<sub>3</sub>Sn and the non-alloying phase is Co<sub>3</sub>SnC<sub>7</sub>, Co<sub>2</sub>C, Co<sub>3</sub>C and/or Ni<sub>3</sub>C. Kajiura et al. teaches on page 4, [0041-0042], that the negative electrode comprises Co powder, Sn powder and graphite powder. Kajiura et al. teaches on page 5, [0056], that CoSn which is the alloy phase alloyed with Li according to an X diffraction in the complex metallic material produced with the sample 5, and CoSn<sub>2</sub> and Co<sub>3</sub>Sn<sub>2</sub>, etc.

Kajiura et al. teaches on pages 2-3, [0024-0028], that the positive active material has the formula  $\text{LiM}_x\text{O}_2$ .

***Claim Rejections - 35 USC § 103***

4. Claims 11 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over by Kajiura et al. (JP 2001143701, translation and abstracts).

Kajiura et al. teaches in the abstract of page 13 and page 2 of translation, a battery comprising an anode containing a Li alloying alloy phase and a Li non-alloying phases. The alloying phase is preferably CoSn, CoSn<sub>2</sub>, Co<sub>3</sub>Sn<sub>2</sub>, Ni<sub>3</sub>Sn<sub>4</sub>, Ni<sub>3</sub>Sn<sub>2</sub> and/or Ni<sub>3</sub>Sn and the non-alloying phase is Co<sub>3</sub>SnC.7, Co<sub>2</sub>C, Co<sub>3</sub>C and/or Ni<sub>3</sub>C. Kajiura et al. teaches on page 4, [0041-0042], that the negative electrode comprises Co powder, Sn powder and graphite powder. Kajiura et al. teaches on page 5, [0056], that CoSn which is the alloy phase alloyed with Li according to an X diffraction in the complex metallic material produced with the sample 5, and CoSn<sub>2</sub> and Co<sub>3</sub>Sn<sub>2</sub>, etc.

In the event any differences can be shown for the product of the product by process claims 11 and 15, as opposed to the product taught by Kajiura et al., such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results. *In re Thrope* 227 USPQ 964; (Fed. Cir. 1985).

With respect to the product by process claims 11 and 15, the determination of patentability is based upon the product itself not upon the method of its production. *In*

*re Thrope* 227 USPQ 964; *In re Brown* 173 USPQ 685; *In re Bridgeford* 149 USPQ 55; *In re Wertheim* 191 USPQ 90. Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown* 173 USPQ 685 and *In re Fessmann* 180 USPQ 324.

5. Claims 10, 12-14, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kajiura et al. (JP 2001143701, translation and abstracts). (translation and abstracts).

Kajiura et al. teaches in the abstract of page 13 and page 2 of translation, a battery comprising an anode containing a Li alloying alloy phase and a Li non-alloying phases. The alloying phase is preferably CoSn, CoSn<sub>2</sub>, Co<sub>3</sub>Sn<sub>2</sub>, Ni<sub>3</sub>Sn<sub>4</sub>, Ni<sub>3</sub>Sn<sub>2</sub> and/or Ni<sub>3</sub>Sn and the non-alloying phase is Co<sub>3</sub>SnC<sub>7</sub>, Co<sub>2</sub>C, Co<sub>3</sub>C and/or Ni<sub>3</sub>C. Kajiura et al. teaches on page 4, [0041-0042], that the negative electrode comprises Co powder, Sn powder and graphite powder.

Kajiura et al. teaches the claimed invention as explained above except does not specifically specify that the anode comprises only Sn, CoSn<sub>2</sub>, CoSn and Co<sub>3</sub>Sn<sub>2</sub>.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have present Sn, CoSn<sub>2</sub>, CoSn and Co<sub>3</sub>Sn<sub>2</sub> in the anode material taught by Kajiura et al. because it is *prima facie* obvious to combine two

compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose. See *In re Kerkhoven*, 205 USPQ 1069; *In re Susi*, 169 USPQ 423.

### ***Conclusion***

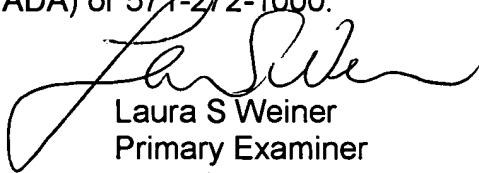
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Laura S Weiner  
Primary Examiner  
Art Unit 1745

June 6, 2006